ACUTE SINUSITIS					
	Duration <4 weeks (updated April 2002)				
	Initial Therapy (1-3 wks)	Second line Therapy (4-6wks)			
Criteria	2 or more or <i>Major</i> factors <sup>1</sup> OR one <i>Major</i> factor and 2 <i>Minor</i> factors <sup>2</sup> OR Nasal purulence on exam	Initial treatment failure  2 or more <i>Major</i> factors <sup>1</sup> OR  one <i>Major</i> factor and 2 <i>Minor</i> factors <sup>2</sup> OR  Nasal purulence on exam			
Assessment	History R/O viral URI, Symptom duration, Previous episodes, treatment Nasal obstruction, Anosmia Facial or dental pain Rhinorrhea, Post nasal drip Visual changes Facial trauma Allergy history Exam- note any: Rhinorrhea (purulent, serous, mucous, bloody), Septal deflection, Nasal polyps, Masses Facial Tenderness-asymmetry Post nasal drainage Visual examination with acuity Cognitive Exam if indicated	Viral URI – Most sinusitis begins as a viral URI, lasts 10-14 days and recovers, however consider acute bacterial rhinosinusitis if symptoms worsen after five days, or if symptoms persist for > 10 days in adults or >14 days in children, or in the presence of symptoms out of proportion to those typically associated with viral infection and treat appropriately.  Subacute Sinusitis (4-12 weeks) no longer acute and not yet chronic will resolve after effective medical therapy  Recurrent Sinusitis >3 episodes per year, lasting 7-10 days with intervening signs of symptoms of chronic sinusitis			
Tests	Radiographs: None required unless primary therapy fails	Radiographs: Coronal CT sinuses without contrast for medically refractory Symptoms - recurrent (>3 episodes in 1 year), subacute (4-12 weeks) or chronic (>12 weeks) symptoms persist. Or symptoms suggesting obstruction, mass, tumor or disease extending to adjacent structures.			
Treatment	Decongestants-local and systemic (caution in hypertensive patients) Antibiotic therapy: 1 2 wk course, treat 7 days beyond last symptom. Analgesics Saline nasal rinses Mucolytics If allergy history: Antihistamines and Nasal Steroids	Repeat first line therapy OR Second line antibiotics- antibiogram³ or culture directed (3 week course), treat 7 days beyond last symptom. Continue to use Decongestants-local and systemic, Analgesics, Saline nasal Rinses and Mucolytics  If allergy history: Antihistamines and Nasal Steroids  Treat Recurrent Acute Sinusitis (>3 episodes per year) as Acute			
Referral		Sinusitis  ENT if abnormal CT <sup>4</sup> Allergy Clinic if strong allergy history			

¹Major Factors:²Minor Factors:Face pain-pressureHeadacheFacial congestion-fullnessFever (non-acute)Nasal obstruction-blockageHalitosisNasal discharge-purulence-discolored postnasal dripFatigueHyposmia-anosmiaDental PainPurulence in nasal cavity on examCoughEar pain-pressure

## <sup>3</sup>See <u>Antibiogram</u>

<sup>&</sup>lt;sup>4</sup>**Abnormal Coronal CT scan without contrast**: Air-fluid levels; mucosal thickening > 2mm; sinus opacification; obstructive or neoplastic pathology or complicated sinusitis – extending beyond the sinuses (meningitis, CNS empyema, brain abscess, cavernous sinus thrombosis, osteomyelitis, and periorbital infections).

CHRONIC SINUSITIS  Duration >12 weeks  Medically Refractory				
Criteria	2 or more <i>Major</i> factors OR one <i>Major</i> factor and 2 <i>Minor</i> factor OR Nasal purulence on exam	Unsuccessful treatment, persistent symptoms after 12 weeks of appropriate antibiotic, decongestant and nasal steroid therapy.		
Assessment	Same as Acute Sinusitis	Unresponsive to Med therapy >12 wks Chronic Differential includes: Opportunistic anaerobic organisms Chronic mucosal disease on CT scans Cystic Fibrosis Neutropenia Immune compromised Anatomic abnormality- septal obst. Osteomeatal Unit (OMU) scarring Contact point pain Dental infections Ciliary dismotility Orbital-cranial complication Nasal polyposis	Recurrent Sinusitis >3 Episodes per year, lasting 7-10 days with intervening signs of symptoms of chronic sinusitis  Subacute Sinusitis (4-12 weeks) no longer acute and not yet chronic will resolve after effective medical therapy	
Tests	Culture Directed Antibiotics Fungal considerations	Consider quantitative immunoglobulins Sweat chloride if indicated in hx CT scan: OMU evaluation		
Treatment	Consider Sub-specialty referral  Rule out underlying disease Anaerobic antibiotic therapy Decongestants-local and systemic (caution in hypertensive patients) Saline nasal rinses Mucolytics Consider Systemic Steroids	Treat <b>Subacute Sinusitis</b> (4-12 weeks) like acute, should resolve with effective medical therapy Treat <b>Recurrent Acute Sinusitis</b> (>3 episodes per year) like acute sinusitis		
Referral	ENT Referral – if abnormal CT or Chronic sinus symptoms Allergy Referral only if strong allergy history and chronic sinusitis	Abnormal CT scans <sup>4</sup> are required for all sub-specialty referral.  Sinus surgery is 85% successful in chronic Sinusitis not related to allergic disease	Document appropriate medical therapy before sub-specialty referral.	

<sup>1</sup>Major Factors:

Face pain-pressure Facial congestion-fullness Nasal obstruction-blockage Nasal discharge-purulence-discolored postnasal drip Hyposmia-anosmia Purulence in nasal cavity on exam

<sup>2</sup>Minor Factors:

Headache Fever (non-acute) Halitosis Fatigue Dental Pain Cough Ear pain-pressure

<sup>3</sup>See <u>Antibiogram</u>

<sup>4</sup>**Abnormal Coronal CT scan without contrast**: Air-fluid levels; mucosal thickening > 2mm; sinus opacification; obstructive or neoplastic pathology or complicated sinusitis – extending beyond the sinuses (meningitis, CNS empyema, brain abscess, cavernous sinus thrombosis, osteomyelitis, and periorbital infections).